CULINARY FOOD SCIENCE (AGLS)

The Culinary Food Science degree program is a food science-based degree in which students develop basic culinary skills along with knowledge of the accompanying sciences. As a graduate, you’ll combine food product development skills and entrepreneurial talents with scientific and technological knowledge.

The department also offers a culinary food science minor (http://catalog.iastate.edu/collegeofagricultureandlifesciences/foodsscienceandhumannutrition/#undergraduateminortext).

Administered by the Department of Food Science and Human Nutrition

Total Degree Requirement: 120 cr.

Students must fulfill International Perspectives and U.S. Diversity requirements by selecting coursework from approved lists. These courses may also be used to fulfill other area requirements. Only 65 cr. from a two-year institution may apply to the degree which may include up to 16 technical cr.; 9 P-NP cr. of electives; 2.00 minimum GPA.

International Perspectives: 3 cr.
U.S. Diversity: 3 cr.
Communications and Library: 10 cr.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 150</td>
<td>Critical Thinking and Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 250</td>
<td>Written, Oral, Visual, and Electronic Composition</td>
<td>3</td>
</tr>
<tr>
<td>LIB 160</td>
<td>Information Literacy</td>
<td>1</td>
</tr>
<tr>
<td>SP CM 212</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
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Total Credits 10

Humanities and Social Sciences: 6-12 cr.

Select Humanities course from approved list

If H Sci student, select:

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 101</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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</table>

Ethics: 3 cr.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FS HN 342</td>
<td>World Food Issues: Past and Present</td>
<td>3</td>
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</tbody>
</table>

Mathematical Sciences: 6-8 cr.

Select at least 3 credits from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 143</td>
<td>Preparation for Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 160</td>
<td>Survey of Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 165</td>
<td>Calculus I</td>
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Select at least 3 credits from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>STAT 101</td>
<td>Principles of Statistics</td>
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Physical Sciences: 9 cr.

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHEM 163</td>
<td>College Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 177</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 163L</td>
<td>Laboratory in College Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 177L</td>
<td>Laboratory in General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 231</td>
<td>Elementary Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 231L</td>
<td>Laboratory in Elementary Organic Chemistry</td>
<td>1</td>
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</table>

Total Credits 9

Biological Sciences: 10-11 cr.

<table>
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<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>BBMB 301</td>
<td>Survey of Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 212</td>
<td>Principles of Biology II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 212L</td>
<td>Principles of Biology Laboratory II</td>
<td></td>
</tr>
<tr>
<td>MICRO 201</td>
<td>Introduction to Microbiology</td>
<td>2-3</td>
</tr>
<tr>
<td>or MICRO 302</td>
<td>Biology of Microorganisms</td>
<td></td>
</tr>
<tr>
<td>MICRO 201L</td>
<td>Introductory Microbiology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>or MICRO 302L</td>
<td>Microbiology Laboratory</td>
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Total Credits 10-11

Animal Science Coursework: 6 cr.

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<thead>
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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AN S 270</td>
<td>Foods of Animal Origin</td>
<td>2</td>
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<tr>
<td>AN S 270L</td>
<td>Foods of Animal Origin Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AN S 460</td>
<td>Science and Technology of Value Added Meat Products</td>
<td>3</td>
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Total Credits 6

Food Science and Human Nutrition: 42 cr.

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>FS HN 101</td>
<td>Food and the Consumer</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 104</td>
<td>Introduction to Professional Skills in Culinary Science</td>
<td>1</td>
</tr>
<tr>
<td>FS HN 110</td>
<td>Professional and Educational Preparation</td>
<td>1</td>
</tr>
<tr>
<td>FS HN 167</td>
<td>Introduction to Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 203</td>
<td>Contemporary Issues in Food Science and Human Nutrition</td>
<td>1</td>
</tr>
<tr>
<td>FS HN 214</td>
<td>Scientific Study of Food</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 215</td>
<td>Advanced Food Preparation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>FS HN 265</td>
<td>Nutrition for Active and Healthy Lifestyles</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 305</td>
<td>Food Quality Management and Control</td>
<td>2</td>
</tr>
<tr>
<td>FS HN 311</td>
<td>Food Chemistry</td>
<td>3</td>
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<tr>
<td>FS HN 311L</td>
<td>Food Chemistry Laboratory</td>
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</tr>
<tr>
<td>FS HN 314</td>
<td>Professional Development for Culinary Food Science and Food Science Majors</td>
<td>1</td>
</tr>
<tr>
<td>FS HN 403</td>
<td>Food Laws and Regulations</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
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<tr>
<td>FS HN 406</td>
<td>Sensory Evaluation of Food</td>
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<tr>
<td>FS HN 407</td>
<td>Microbiological Safety of Foods of Animal Origins</td>
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<tr>
<td>FS HN 411</td>
<td>Food Ingredient Interactions and Formulations</td>
<td>2</td>
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<tr>
<td>FS HN 412</td>
<td>Food Product Development</td>
<td>3</td>
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<tr>
<td>FS HN 420</td>
<td>Food Microbiology</td>
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Take one of the following courses for 2 credits:

- FS HN 491B Supervised Work Experience: Food Science
- or FS HN 491D Supervised Work Experience: Culinary Science

| Total Credits | 42 |

**Hospitality Management: 12 cr.**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HSP M 133</td>
<td>Food Safety Certification</td>
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<tr>
<td>HSP M 380</td>
<td>Food Production Management</td>
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<tr>
<td>HSP M 380L</td>
<td>Food Production Management Experience</td>
<td>3</td>
</tr>
<tr>
<td>HSP M 383</td>
<td>Wine and Spirits in Hospitality Management</td>
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<tr>
<td>HSP M 487</td>
<td>Fine Dining Event Management</td>
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| Total Credits | 12 |

**Electives 0-16 cr. Select from any university coursework to earn at least 120 total credits.**

Go to FS HN courses. (http://catalog.iastate.edu/azcourses/fs_hn/)

Culinary Food Science, B.S.

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
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<tr>
<td>FS HN 110</td>
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<td>FS HN 104</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 163</td>
<td>4</td>
<td>FS HN 167</td>
<td>3</td>
</tr>
<tr>
<td>or 177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 163L</td>
<td>1</td>
<td>BIOL 212</td>
<td>3</td>
</tr>
<tr>
<td>or 177L</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FS HN 101</td>
<td>3</td>
<td>BIOL 212L</td>
<td>1</td>
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<td>MATH 140,</td>
<td>3-4</td>
<td>ECON 101</td>
<td>3</td>
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<td>143, 160,</td>
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<tr>
<td>165</td>
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<tr>
<td>ENGL 150</td>
<td>3</td>
<td>STAT 104</td>
<td>3-4</td>
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<td>LIB 160</td>
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| 16-17     | 14-15 |

**Second Year**

<table>
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<tbody>
<tr>
<td>CHEM 231</td>
<td>3</td>
<td>FS HN 265</td>
<td>3</td>
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<tr>
<td>CHEM 231L</td>
<td>1</td>
<td>BBMB 301</td>
<td>3</td>
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<td>ENGL 250</td>
<td>3</td>
<td>MICRO 201</td>
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</tr>
<tr>
<td>or 302</td>
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| 13        | 15      |

**Fourth Year**

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<th>Spring</th>
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<tbody>
<tr>
<td>FS HN 406</td>
<td>3</td>
<td>AN S 460</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 491B</td>
<td>2</td>
<td>FS HN 342</td>
<td>3</td>
</tr>
<tr>
<td>or 491D</td>
<td></td>
<td>(if not yet completed)</td>
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</tr>
<tr>
<td>HSP M 383</td>
<td>2</td>
<td>FS HN 407</td>
<td>3</td>
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<tr>
<td>HSP M 487</td>
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<td>FS HN 412</td>
<td>3</td>
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<tr>
<td>Elective*</td>
<td>3</td>
<td>Humanities</td>
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<tr>
<td>U.S. Diversity course</td>
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</table>

| 16        | 15      |
* Choose elective courses to total equal to or greater than 120 credits.

**Notes:** Planned course offerings may change and students need to check the online Schedule of Classes each term to confirm course offerings: https://classes.iastate.edu (https://classes.iastate.edu/).

This sequence is only an example. The number of credits taken each semester should be based on the individual student's situation. Factors that may affect credit hours per semester include student ability, employment, health, activities, and grade point consideration.